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EPA

NEW DIRECTIONS

A REPORT ON REGULATORY REINVENTION

The Brownfields Economic Redevelopment Initiative

Laying the Framework for Sustainability

inside

EPA REINVENTION

The Reality of Brownfields

Brownfields are abandoned, idled, or under-used industrial or commercial properties whose redevelopment is complicated by real or perceived environmental contamination. These sites exist in many American communities. In fact, the General Accounting Office, the U.S. Conference of Mayors, and others estimate that more than 600,000 brownfield sites are located throughout the country, not only in urban settings, but in suburban and rural areas too. Given the large number of higher risk toxic waste sites under the federal Superfund cleanup program, brownfields have been a lesser priority, often neglected or forgotten. Over time, these contaminated sites sow the seeds of urban blight, creating a cycle of degradation that can be difficult to break. As community health and economic opportunity decline, new development moves elsewhere, leaving hopelessness and despair in its wake, destroying open space, and adding to urban sprawl.

Breaking this cycle requires attention not just to environmental quality, but to equally important social and economic issues within the affected community. Such issues present a whole new challenge for EPA. Our commitment to cleaning up and preventing pollution remains strong. Yet, today we understand that environmental improvements alone cannot assure safe, clean, vibrant communities for our citizens. We must strive for a higher goal — achieving broad-based sustainability. This state of balance between environmental, economic, and social goals will not be achieved through a federally prescribed regimen alone; rather, bottom-up solutions are needed, crafted by all affected parties.

This bottom-up, community empowerment approach is the foundation of EPA's Brownfields Economic Redevelopment Initiative (Brownfields Initiative). Fully launched in 1995, this initiative supports pilot projects to test innovative approaches to solving brownfield problems. Designed to provide national models for other communities facing similar circumstances, the Administration has pledged to support 300 Brownfields Initiative pilot projects by the end of 1999. To date, 226 communities have benefitted from the program's technical and financial assistance. As a sign of how EPA is supporting a more complete problem-solving approach, we have offered some very nontraditional assistance, too.

What is sustainability?

In its 1996 report, *Sustainable America*, the President's Council on Sustainable Development used the definition created by the World Commission on Environment and Development in 1987. The Commission stressed the interrelatedness of environmental, economic, and social issues worldwide and defined sustainability as the ability ". . . to meet the needs of the present without compromising the ability of future generations to meet their own needs."

A More Complete Package for Problem-Solving

The Agency's Brownfields Initiative represents a breakthrough in how traditional environmental programs are run. Rather than focusing on just single pollution issues, such as air, land, or water quality, the comprehensive, multifaceted design encourages communities to address many diverse and interrelated issues. It builds on the trials and errors of past community cleanup and redevelopment efforts. Time and time again, the lesson learned from these experiences is that revitalization requires attention not only to health and environmental issues, but to social and economic concerns as well.

Based on this lesson, EPA has taken several steps to foster a more comprehensive problem-solving approach. These steps include developing the technical tools needed to conduct assessments and cleanup activities, working to remove the liability obstacles inadvertently created through Superfund regulation, and supporting the job training required to ensure a ready workforce for the new jobs that result from revitalization. Through these and other actions, EPA and its partners are laying the foundation that is needed to help communities break the cycle of degradation and achieve long-lasting sustainability.

Community residents gather at a Brownfields meeting in New Orleans.

Providing Financial Assistance

EPA awards assessment grants valued at up to $200,000 over a 2-year period to communities selected for pilot projects. These funds do not pay the cleanup bills, but provide seed money for the environmental site assessment and planning that allows communities to attract investments for revitalization and sustainable growth. The $42 million awarded to date, has helped create more than 2,000 new jobs with tens of thousands more projected. It also has served as a powerful springboard for change, leveraging nearly $1 billion in funds from private and public sources. The city of Dallas, Texas, for example, started with a $200,000 assessment grant and leveraged over $53 million in public and private development funds, redeveloping six sites and reclaiming more than 1,200 acres of brownfields. Residents now benefit from a new city recreation facility, a housing and shopping development, an environmental training and technology center, and hundreds of new jobs.

The Brownfields Initiative's cleanup revolving loan fund provides capital to these pilots as they move beyond assessment and planning to begin cleanup. States, counties, cities, or tribes that have previously received assessment grants may apply for additional grants to set up revolving loan funds. These funds provide capital for lending to public and private entities such as local governments and community development organizations. Loan repayments provide a continuing source of capital for new loans, dramatically increasing the number of brownfield cleanups over time. Since 1997, EPA has awarded up to $350,000 each to 23 cities and states to set up revolving loan funds. The 1999 fiscal year congressional budget authorizes $35 million to support additional revolving loan funds. In addition, starting this fiscal year, the grant amount for revolving loan funds has been increased, allowing support up to $500,000.

Offering Special Tools and Technical Assistance

Because each Brownfield pilot presents its own cleanup and revitalization challenges, decisions related to cleanup and revitalization are best made at the state and local levels. Years of experience cleaning up Superfund sites, however, provides the Agency with technical resources and expertise that can be valuable to communities planning and managing Brownfields Initiative projects. EPA's *Road Map to Understanding Innovative Technology Options for Brownfields Investigation and Cleanup* and the companion *Tool Kit of Information Resources for Brownfields Investigation and Cleanup* draw from this experience and provide useful references. EPA also offers guidance on related issues. A document on soil screening, for example, helps local decision-makers quickly determine which portions of a site require further study and which pose little risk to human health and might be ready for development without extensive cleanup. Other materials discuss how to develop a cultural profile to better understand community values and needs. EPA guidance not specific to brownfields also can prove useful. The Agency's cumulative risk assessment guidance issued in July 1997, for example, encourages consideration of multiple pollution sources, pathways, and effects in assessing environmental risk. Using this guidance, environmental managers in a variety of circumstances, including brownfields, can assess risks in a more consistent, scientifically complete way. EPA's brownfields Web site at <epa.gov/brownfields> provides a gateway to these and other technical tools as well as information about cleanup and redevelopment issues.

Supporting Job Training

To create job opportunity for residents living near brownfields sites and to ensure well-trained workers for cleanup

A former crab picker at her new job, assembling solar panels in Maryland.

and redevelopment activities, EPA has initiated a Brownfields Initiative job training and development demonstration pilot program. Public and private institutions can receive grants of up to $200,000 over 2 years for workforce development activities related to assessment, cleanup, and redevelopment of brownfields properties. The first 11 pilots, which began in August 1998, are bringing together community groups, job training organizations, educators, investors, lenders, developers, and others. Their goal is to facilitate cleanup and prepare trainees for employment in the environmental field. Through its pilot project, East Palo Alto, California, for example, partnered with a nonprofit job training center to establish a hazardous materials training program. The first 34 graduates have completed classroom and on-the-job training in contamination removal, and most have been hired with regional companies. These community members are discovering first hand how job training can help instill hope and rebuild lives.

Increasing Flexibility

Rather than imposing one absolute cleanup standard, the Brownfields Initiative allows anticipated use of the property, as envisioned by the community, to dictate the cleanup level required. A multistory parking lot, for example, would require less cleanup than a children's playground. Because the amount and type of contamination at a brownfields site often vary from one section to another, communities can use a range of innovative cleanup strategies to prepare each area for its intended future use.

Strong community involvement is pivotal to EPA in allowing this type of flexibility. Early community involvement in discussions about desired future uses of brownfields properties, as well as related issues like acceptable risk and preferred cleanup methods, result in a more democratic decision-making process; greater support for the remedies selected; and faster, more effective cleanups. Ultimately, these benefits are good for the environment, good for business, and good for neighborhoods and the people who live there.

Pushed Through Tax and Financial Reforms

Brownfields issues can't always be worked out within individual cities or communities; in some cases, they have to be addressed more broadly at a national policy level. In the past, for example, disincentives for cleaning up brownfields property were buried within the national tax code. Expenditures for cleanups had to be capitalized, or deducted from taxes, over time. The Administration's brownfields tax incentive in the August 1997 Taxpayer Relief Act removed this disincentive. Now, cleanup costs for properties in targeted areas can be fully deducted during the year that expenses were incurred. This new allowance provides an additional financial incentive for communities and private interests to bring brownfields sites back into productive use. Nationally, the Treasury Department estimates this economic benefit may be worth up to $1.5 billion.

Lender liability concerns stemming from earlier Superfund experience have been another disincentive for brownfield investment. Even though brownfields are less contaminated than Superfund sites, fears about the high costs associated with Superfund liability have often led industrial developers to shun otherwise usable brownfields. Instead, they seek out undeveloped open space for new growth. Over time, such decisions have contributed to urban decay, the disappearance of green space, and urban sprawl. Recently, EPA addressed Superfund liability concerns for prospective brownfields lenders, purchasers, and property owners. A new Agency policy under the Asset Conservation, Lender Liability, and Deposit Insurance Protection Act of 1996 outlines the circumstances under which lenders are protected against enforcement actions by the U.S. government and third party claims for Superfund liability. This clarification provides a basis for estimating project costs, essential information for an investor considering a brownfields investment.

Based on better and more recent information, EPA also removed approximately 30,000 sites from the national Superfund inventory. This action sends a signal that the federal government no longer believes that worst-case remediation measures are warranted. With uncertainty about the extent of risk and liability reduced, the chances for cleanup and redevelopment at these brownfield sites improves significantly.

Another way EPA is working to encourage lending for brownfields projects is through changes to the Community Reinvestment Act (CRA) regulations, administered by the Treasury Department. In 1977, Congress enacted CRA requiring banks, thrifts, and other lenders to make capital available in low- and moderate-income neighborhoods. Now due to new provisions for brownfields, lenders subject to the CRA requirements can claim community development loan credits for lending money if it is being used for brownfields cleanup and redevelopment activities. Again, the goal is to provide more incentive for investment that can help stabilize and turn around declining areas.

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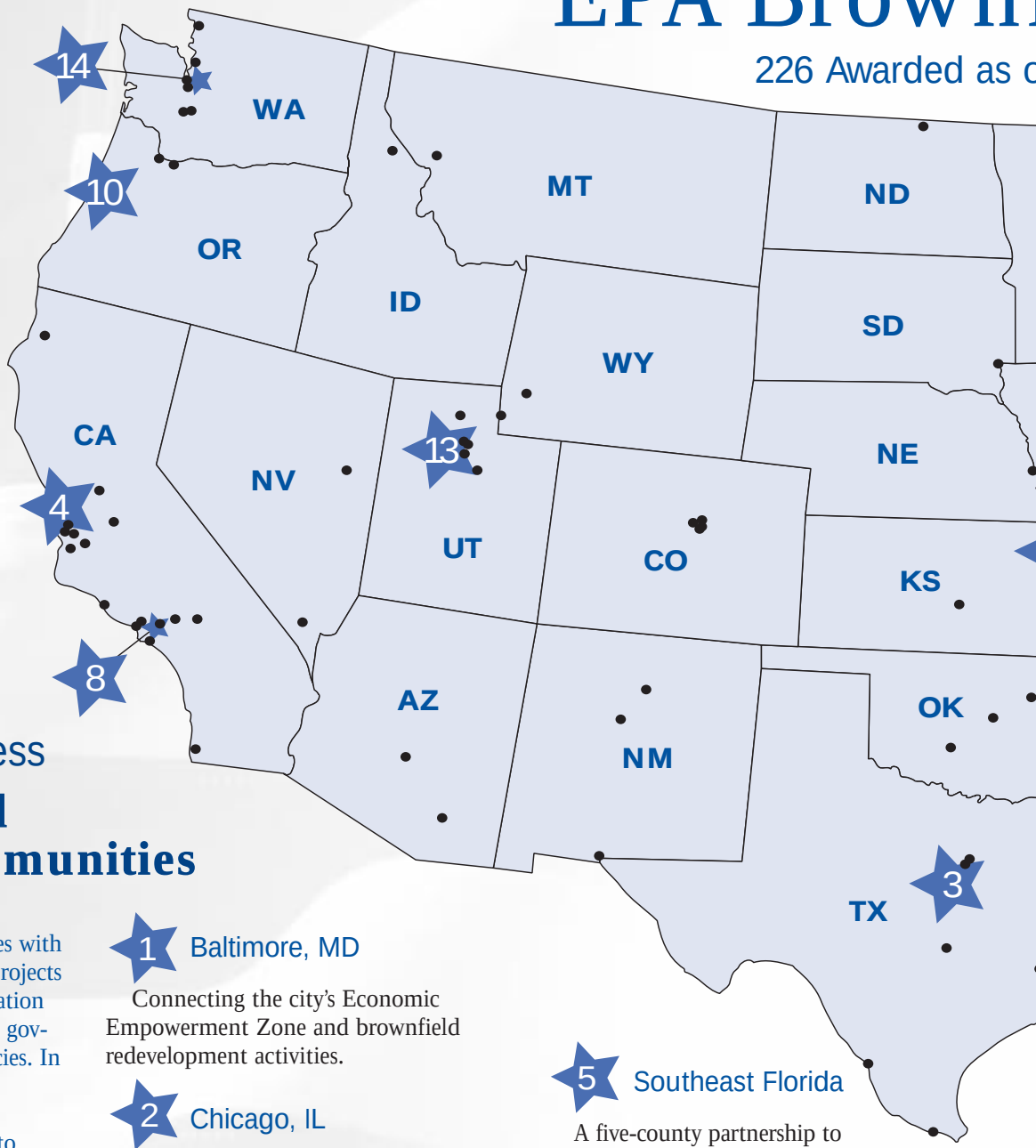


Building On Success

The Brownfield Showcase Communities

For several years, communities with Brownfield Initiative pilot projects have asked for more cooperation and interaction among all levels of government, particularly federal agencies. In 1997, this request prompted Vice-President Gore to announce a Brownfields National Partnership to bring together the resources of more than 20 federal agencies to deal strategically with local cleanup and reuse issues. This multiagency partnership builds on the work already done in 16 localities by turning pilot projects into "Brownfields Showcase Communities." Considered the centerpiece of the federal partnership, the communities selected receive special technical, financial, and other assistance as well as national visibility for their brownfields efforts. Recognized for their innovative and successful approaches, these 16 communities are serving as national role models for other communities facing similar redevelopment situations and challenges.

1 Baltimore, MD

Connecting the city's Economic Empowerment Zone and brownfield redevelopment activities.

2 Chicago, IL

Showing how a city can lead on brownfield issues through the collaboration and partnership of a community-based Brownfields Forum.

3 Dallas, TX

A national leader in leveraging federal environmental cleanup and economic development funds.

4 East Palo Alto, CA

Showing how a bypassed, historically agricultural community can successfully clean up brownfield areas and broaden its economic base.

5 Southeast Florida

A five-county partnership to revitalize an urban core and alleviate development pressures around the imperiled Everglades.

6 Glen Cove, NY

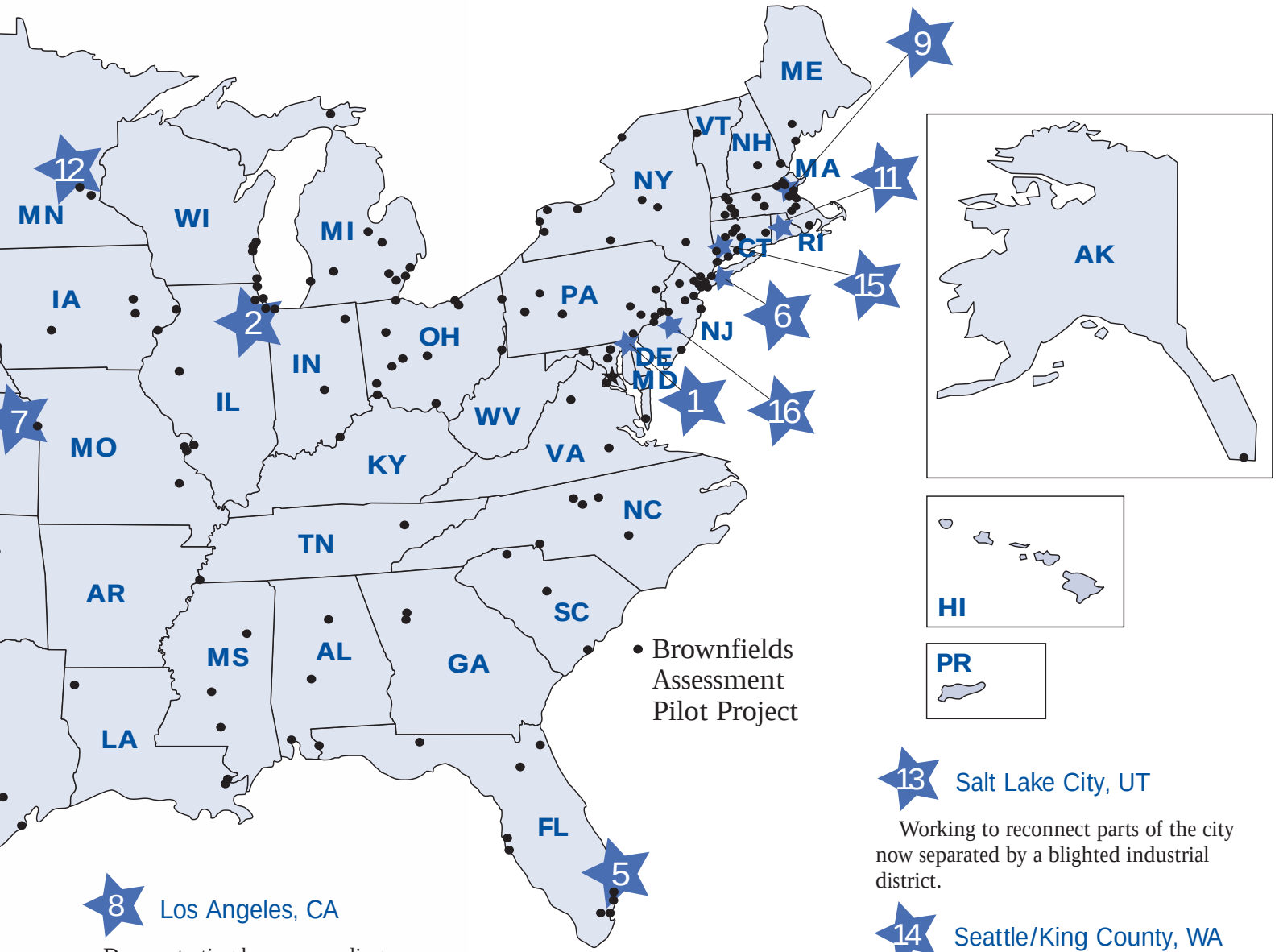
A small Long Island community successfully involving local citizens in uniting redevelopment efforts along the waterfront.

7 Kansas City, KS and MO

Showing how cities, states, and federal agencies can join together to solve brownfields problems crossing State lines.

fields Pilots

of November 1998



8 Los Angeles, CA

Demonstrating how a sprawling metropolis can revitalize brownfields through a concentrated transportation corridor project.

9 Lowell, MA

A classic northeastern manufacturing city focusing on revitalizing its former industrial sites.

10 Portland, OR

Using the transportation system to spur brownfields cleanup and maintain controlled, sustainable growth.

11 State of Rhode Island/Providence

Working together to improve conditions in the Woonasquatucket River watershed, with a focus on greenway development.

12 St. Paul, MN

Using its Port Authority to concentrate economic revitalization and redevelopment activities with support from a strong state cleanup program.

13 Salt Lake City, UT

Working to reconnect parts of the city now separated by a blighted industrial district.

14 Seattle/King County, WA

Showing how a major city and rural county can work together in a regional approach to brownfields development.

15 Stamford, CT

A small, northeastern industrial city planning to reclaim its harbor area through brownfields redevelopment.

16 Trenton, NJ

Successfully partnering with a neighborhood community development corporation to involve the community in brownfields redevelopment activities.

How the Brownfields Process Works

Because no two brownfields are the same, each project follows a unique course toward revitalization. The pertinent questions in each situation are different. Is a cleanup needed? Is there a misperception in the community about the safety of an abandoned factory site? What sort of redevelopment would community stakeholders prefer? Are potential redevelopers frightened off by liability concerns? The community-based problem-solving approach of the Brownfields Initiative has proven effective at helping communities find the answers.

Communities come to EPA with a vision, but need help getting from point A to point B. That's where EPA steps in with financial support through its assessment grants. Communities get the seed money they need to begin work. But they also benefit from having models and assistance on technical, legal, and stakeholder issues that can further "jump start" the redevelopment process. With this support, communities begin to build local partnerships, involve their citizens in decision-making, and leverage resources to pursue goals far beyond what would be possible with a single federal grant. Because the Brownfields Initiative aims to empower, EPA's direct involvement in each assessment pilot ends after 2 years. By that time, the capacity building that occurred during the pilot phase provides a framework for redevelopment to continue. Financial support from revolving loan funds can strengthen this framework even more.

Under the Brownfields Initiative, States and local governments have the responsibility for actually managing assessment pilot projects. The projects generally evolve through four phases, though activities in some phases can be undertaken concurrently with activities in others. Community involvement is essential at every stage, from beginning to end.

Site Assessment

Similar to an audit, a site assessment is conducted to determine the overall condition of an area. The primary focus is determining whether contamination is likely. These assessments involve investigating historical records, mostly through paper or electronic searches, to learn about past and current conditions and uses of the property. During this stage, project managers also begin considering other issues such as anticipated future use of the site, special community needs or concerns, and applicability of innovative cleanup technologies.

Site Investigation

This phase focuses on identifying, locating, and characterizing the nature and extent of contamination. A detailed field study is performed that might include analyzing soil, ground water, surface water, and sediment samples to assess contamination and possible threats to the environment or any people living or working nearby. These results are the basis for setting cleanup and redevelopment goals. They allow investigators to quantify risks and then determine acceptable and unacceptable risk levels. This determination guides the development of appropriate cleanup plans, which help eliminate unnecessary delays in redeveloping and using the property later on.

Assessing Cleanup Options

Once contamination levels are known, it is possible to choose technologies suitable for meeting cleanup and redevelopment objectives. To ensure community support and confidence, project managers educate and actively involve local representatives in the cleanup selection process. They must consider budget requirements and maintain a work schedule so the project remains financially viable. Also, the role of institutional controls, like zoning and deed restrictions that might apply during cleanup, must be considered.

Cleanup Design and Implementation

The final phase focuses on designing and implementing a cleanup plan to prepare the property for redevelopment and use. Key factors to consider include any federal, state, local, and tribal requirements for conducting cleanup activities; monitoring cleanup so work stops when goals are reached; how to involve the community in designing and implementing the cleanup plan; and protecting community residents and property during actual cleanup. A tradeoff also must be considered between cost and meeting redevelopment project deadlines. Project managers, for example, might need to consider whether some redevelopment activities, such as renovating an existing building, could be conducted concurrently with other cleanup actions.

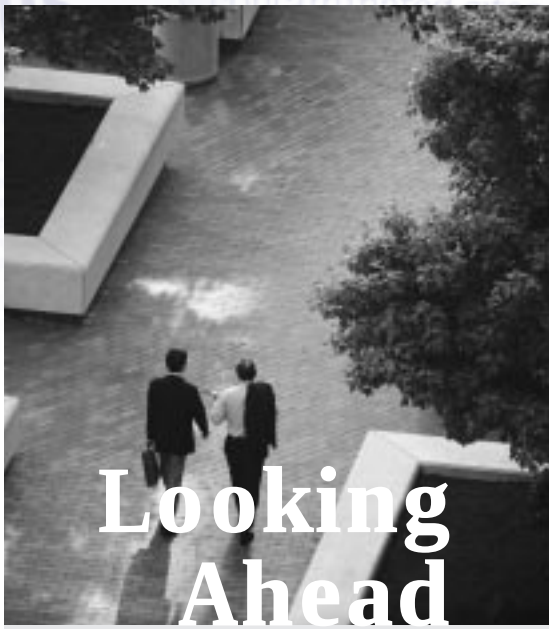
Brownfields As An Investment Opportunity

As a result of recent reforms, more developers are finding brownfields lucrative from a business standpoint. The land often is desirable for the reasons businesses preferred inner city locations in the first place — well-developed infrastructure, proximity to public transportation, and easy access for customers and suppliers. And yet State laws and local requirements still are barriers in some situations. For many development companies, however, EPA's liability limits and increased flexibility (among other factors) make brownfields a sound business choice. Consulting engineers George Kanapel and Robert Moore have characterized brownfields ventures as "...a potential asset, a chance to turn a property around, maybe make a profit," and "more of an economic development program than an environmental problem" ("Brownfield Cleanups Debug Development," E*ngineering News-Record*, April 28, 1997).

> "EPA's liability limits and increased flexibility...make brownfields a sound business choice."

Bruce S. Beattie, director of program development for ITC Brownfields Services Corporation, notes brownfields projects can generate returns in the 20 to 30 percent range, compared to 5 percent on straight environmental business investments (*Engineering News-Record*, April 28, 1997). "There's a lot of capital out there looking for the highest rate of return, and brownfields are a source of that," says Jennifer Johnson, accounting firm division manager ("For Urban Wastelands, Tomatoes and Other Life," *The New York Times*, March 3, 1998).

Some companies, like Jacoby Development, Inc., see brownfields as a welcome opportunity to apply their development expertise for the greater societal good. After years of successfully developing shopping centers around well-known national clients, James Jacoby has turned to nontraditional development projects. These include the largest brownfield project in Georgia to date — redeveloping the 138-acre Atlantic Steel heavy industrial site in downtown Atlanta into a mixed use commercial, retail, office, residential, and entertainment complex. Other undertakings in Florida include developing an aquaculture farm in Plantation Key and creating a center for manatee and sea turtle rehabilitation, as well as dolphin therapy in Fort Myers, each requiring technological innovation. Jacoby was attracted to brownfields redevelopment by the new environmental guidelines allowing more flexibility. The types of cleanup can match the specific types of contamination, depending on the final intended uses of the property. In addition, the ability to negotiate and adjust the location of various components within a brownfields site can make certain development economically feasible. The lessons learned from Atlantic Steel will be valuable to future brownfields projects. This also is significant to Jacoby. "We're very good at what we've done in the past... (and) I want to give something back," he says, "so we're now trying to go from success to significance. I'm fortunate that I can try to do both."(*Atlanta Business Chronicle*, September 1998).



Looking Ahead

During the coming year, EPA will continue working to address the nation's brownfield needs. In addition to supporting the existing pilots, the Agency will offer assistance to more communities as we work toward the Administration's goal of 300 brownfield projects by the end of 1999. Hundreds of communities will have a chance to compete for site assessment, cleanup revolving loan funds, and job training support. For information about these grant programs, or about brownfields issues in general, visit the program's Web site at <epa.gov/brownfields>. Information also is available by calling 202 260-4039 or by writing to U.S. EPA, (5101), 401 M Street, SW., Washington, DC 20460.

FOR MORE INFORMATION

about EPA's efforts to reinvent environmental protection, contact EPA's Office of Reinvention at **202 260-1849.** Or look for more information on the Internet at **<www.epa.gov/reinvent>**.

Brownfields as a Catalyst for Change

Besides revitalizing neighborhoods and creating national models to help more communities address their brownfield problems, the comprehensive problem-solving approach of the Brownfields Initiative is driving change within other environmental programs. Recognizing the problems that brownfields and other communities face in controlling stormwater runoff, for example, EPA is now working to modify eligibility requirements under the clean water state revolving loan fund so that stormwater control projects are eligible for funding. This action should provide more capital to address a common problem associated with development activity.

The Brownfields Initiative also is being used to examine the impacts of clean air regulations on cleanup and redevelopment. Under the Clean Air Act, communities not meeting federal clean air standards may be subject to development constraints. These requirements can slow brownfield redevelopment. In some instances, however, allowing a brownfields redevelopment or other development project may prove more beneficial than moving a project outside the nonattainment area to undeveloped land. Results from Brownfield Initiative pilots in Baltimore, Dallas, and Chicago will show how we can better achieve clean air goals and still allow development to proceed.

In an effort aimed at brownfields prevention, EPA is working to identify flexibility within the Resource Conservation and Recovery Act (RCRA) that could be used to encourage safe and environmentally protective cleanup of RCRA facilities. This initiative aims to facilitate reuse and redevelopment in order to prevent thousands of corrective action properties from becoming the brownfields of the future.

Another effort focuses on the opportunities for brownfield cleanup and redevelopment during closure or alignment of federal military bases. Contamination on military bases is a common problem; however, the levels of contamination on any given site may range considerably. Recognizing an opportunity to address the less contaminated areas, EPA is supporting a study on how they might be cordoned off and targeted for more immediate attention. The goal is to expedite action for brownfield areas, and avoid the delay that might overwise result because of association with higher risks on the base property.

Proven success through the Brownfields Initiative also is affecting enforcement. Increasingly, communities are requesting brownfields redevelopments as part of legal settlements that compensate residents for environmental violations in their communities. In Pittsfield, Massachusetts, for example, General Electric faces a $200 million settlement for releasing polychorinated biphenyls and other hazardous substances into the Housatonic River. In addition, the company has agreed to clean up the injured river and to conduct a brownfield redevelopment project on part of the defunct plant. Working with the Pittsfield Economic Redevelopment Authority, General Electric will make a multimillion dollar investment in Pittsfield. This settlement and others like it provide strong evidence about the value stakeholders see in brownfields cleanup and redevelopment projects.

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